

Sub-Agreement

**(Health Science Research Grant from Ministry of Health, Labor and Welfare Japan:
Grant Title; Health risk assessment of dietary intake of lead and arsenic)**

This Sub-Grant Agreement (“Sub-Agreement”) is made on a collaborative research project between **Jichi Medical University**, (Jichi Medical University is a private university in Shimotsuke, Tochigi, Japan, **Address:** 3311-1 Yakushiji, Shimotsuke, Tochigi Prefecture 329-0498, Japan. **Phone:** +81 285-44-2111) (hereinafter referred to as "JMU") of the one part and Aga Khan university, a body corporate, established under the laws of Pakistan by virtue of President Order No. 3 of 1983, having a campus at Stadium Road, Karachi, Pakistan (hereinafter referred to as "the AKU") of the other part.

WHEREAS, under the Ministry of Health, Labor and Welfare, Japan (hereinafter referred to as “MHLW”) a grant was awarded to JMU in pursuance of a proposal and JMU is further awarding a grant to AKU in this regard to do work as defined in the scope of work attached as Annexure A.

AND WHEREAS, the AKU has agreed to perform the work required to be performed by the AKU for the purposes of the Project and as specified and described in the proposal.

NOW THEREFORE the parties agree to enter into this Grant Agreement on the following terms and conditions:

1. Scope of Work and Remuneration

1.1 The AKU shall perform work as specified and particularly described in the annexure A and for performing such work JMU will pay to the AKU a maximum amount of ¥714,600 (hereinafter referred to as the "Grant Funds). AKU shall carry out work between the period 01 January,2014 to 31st March, 2014 and Grand Funds to be disbursed by JMU to the AKU shall be in line with the Budget Annexed herewith and marked as Annexure "B". It is agreed that the AKU shall ensure that all the work required to be performed by the Sub recipient as per the proposal, shall be performed in a manner as set out in the proposal and/or under this Agreement.

| Deliverables receiving date | Payment Schedule | Contingent Upon |
|-----------------------------|------------------|--|
| | ¥714,600 | 100% within 30 days of signing of the agreement and upon submission of an invoice by the AKU |
| TOTAL | 714,600 | |

AKU to fill the Bank Wire Transfer Information form (Annexure "D") attached along with this Agreement and send to JMU.

2. Reporting

AKU is required to submit brief technical reports to JMU specifying the work done upto the point of that deliverable and submitting an invoice of the amount due. Reports should be submitted electronically to the attention of Dr. Fujio Kayama via email (kayamaf@jichi.ac.jp) and (Mrs. Kyoko Isaoka) via email (keiri3@jichi.ac.jp) as per above deliverables table.

AKU also agrees to submit such other reports as JMU may reasonably request from time to time.

3. Record Maintenance and Inspection:

The AKU agrees to maintain adequate records for the Project (both technical and financial) and shall make them available to JMU (physically or electronically), as and when required, to enable it to easily determine how the Grant Funds were expended. All expenses should be based on the approved budget. The Foundation and/or JMU reserve the right to disallow inappropriate expenses or those not relevant to the Project. All records and systems should be maintained on generally accepted International Accounting Standards prevailing in the country of AKU.

4. Indemnity:

a. AKU will indemnify JMU, its directors, trustees, officers, employees, contractors, staff, and agents for any and all damages, costs, expenses and other liabilities, including reasonable attorney's fees and court costs, arising out of the AKU's performance of the Services to the extent that any such claim is caused by its negligence, recklessness, willful misconduct, failure in performing its obligations, or any breach of any warranty or representation under this agreement.

b. JMU will indemnify the AKU, its directors, trustees, officers, employees, contractors, and agents for any and all damages, costs, expenses and other liabilities, including reasonable attorney's fees and court costs, to the extent that any such claim is caused by JMU's negligence, recklessness, willful misconduct, failure in performing its obligations, or any breach of any warranty or representation under this Sub-agreement. JMU also agrees to indemnify AKU for any defects in any sample as mentioned in the Materials Transfer Agreement. The material is of an experimental nature and is provided without warranty of fitness for any purpose, or any other warranty or representation, whether express or implied.

5. Approvals and standards:

AKU will obtain all the necessary approvals from its relevant Governing Body and its ethical review committee. JMU also warrants that it has obtained approvals from its necessary Governing bodies regarding this project and grant.

6. Use of Grant Funds:

Grant Funds shall be used for the purposes of the scope of work stipulated under this Agreement. JMU will pay fixed amounts at the completion of each deliverable and this amount of (state amount) will not be exceeded in any circumstances except by written consent of JMU.

7. Political Campaign / Lobbying Activity:

Grant funds shall not be used by the AKU to influence the outcome of any election for public office or to carry on any voter registration drive. There is no agreement, oral or written, permitting the Grant funds to be directed to or earmarked for lobbying activity or other attempts to influence local, state, federal, or foreign legislation. AKU's strategies and activities, and any materials produced with grant funds, will comply with applicable local, state, federal, or foreign lobbying law. AKU agree to comply with lobbying, gift and ethics rules applicable to the Project under local, state, federal or foreign law.

8. Assignment:

This Agreement or any of the rights or obligations under this Agreement shall not be assigned without JMU's prior written consent. An assignment includes (a) any transfer of the Project or any part thereof; (b) an assignment by operation of law, including a merger or consolidation, or (c) the sale or transfer of all or substantially all of AKU's assets. This assignment does not include outsourcing non-research related activities to third parties eg. Transportation related to the project.

9. Force Majeur:

Both parties understand and agree not to hold any other party responsible and accountable in case either party fails to fulfill its obligations and responsibilities because of reasons including Acts of God, war, floods, terrorism, riots, government restriction or such other reason being beyond the control of either Party.

12. Disputes:

In the event of any controversy or claim arising out of or relating to any provision of this Sub-Agreement or any breach thereof, the parties will try to settle such conflict amicably between themselves. Further they may resort to arbitration if things are not settled bilaterally.

13. Intellectual Property Rights:

Both AKU and JMU will promptly disclose to each other all inventions, discoveries, improvements, designs, processes, formulations, products, computer programs, works of authorship, databases, mask works, trade secrets, and know how (whether or not patentable or subject to copyright or trade secret protection) first conceived or reduced to practice during the performance of the services under this Sub-Agreement. The ownership of any of the aforesaid intellectual property rights created jointly during the performance of this Agreement, shall vest jointly between JMU and AKU. The parties will jointly file application for the purposes of seeking protection and/or registration of the intellectual property rights created during the performance of this Sub-Agreement and the cost for seeking such protection and/or registration shall be borne jointly by the parties in equal proportion. The ownership of any of the aforesaid intellectual property rights created solely by AKU during the performance of this Sub-Agreement, shall vest in the AKU. The ownership of any of the aforesaid intellectual property rights created solely by JMU during the performance of this Sub-Agreement, shall vest in JMU.

14. Publication

AKU and its investigators shall be free to publish, present or use any of the results arising from the performance of the Research under this Sub-Agreement for their own instructional, research or publication objectives, provided that such use does not disclose any of JMU's Confidential Information as described in ARTICLE 15 hereof other than as required to communicate an scientifically appropriate description of the methods and results of the Research. This publication also allows identification of JMU as a part of the publication

process. At least thirty (30) days prior to submission of any publication or presentation the AKU and the Investigator shall submit any proposed publication or presentation to JMU for review and comment. Expedited reviews for abstract presentations may be arranged if mutually agreeable to the parties. Upon notice of JMU to the AKU that JMU reasonably believes that patent applications should be filed prior to any publication, then publication will be delayed until such applications have been filed the delay not to exceed 90 days unless by mutual agreement of JMU, the AKU and the AKU's Project Director. Except as specifically agreed to in this Agreement, neither party will use the other party's name in for advertising, for other commercial purposes, or otherwise, without appropriate written permission, unless required by law or government regulation.

15. Confidentiality:

Except with the prior written consent of JMU, the AKU shall ensure that it will not at any time communicate to any third party any confidential information disclosed to the AKU for the purposes of this Sub-Agreement or discovered by the AKU in the course of the work performed under this Sub-Agreement nor shall the AKU make public any information as to the recommendation formulated in the course of or as a result of work performed under this Sub-Agreement. The information required to be kept confidential includes amongst others the information pertaining to JMU, Foundation and their respective staff, employees, faculty etc as well as well as any data relating to the subjects or their medical tests or their results thereof that the AKU may come across during the completion of its activities under this Sub-Agreement.

Since the services involve substances or materials supplied by AKU (hereinafter referred to as "AKU's Materials"), the JMU agrees to treat AKU's Materials and all information concerning AKU's Materials as Information. JMU will return all unused AKU's Materials to AKU at the completion of the Services, except samples which it can destroy as per mutual agreement between AKU and JMU. AKU agrees to provide the JMU all Information in its possession concerning AKU's Materials that is reasonably necessary for safe and proper handling of AKU's Materials for performance of the Services.

16. Termination:

If (a) JMU is not reasonably satisfied with AKU's performance under this Agreement or the content of any written report from AKU as required under this Grant Agreement, or (b) AKU fails to comply with any term or condition of this Agreement, JMU has the right at its discretion to terminate this Agreement. Due intimation will be provided by JMU to AKU and proportionate payment will be made for deliverables already provided by AKU.

18. Entire Agreement; Amendment.

This Sub-agreement constitutes the entire agreement and supersedes any prior oral or written agreements or communication between the two parties regarding its subject matter. The provisions of this Sub-agreement are severable so that if any terms or provision is found for any reason to be invalid, illegal, or unenforceable, such finding shall not affect the validity, construction, or enforceability of any remaining terms or provision. This Sub-agreement may be amended or modified only by a mutual written agreement (modification) of the parties.

21. Warranty Disclaimer and Limitation of Liability

Except for a party's indemnification obligations above and obligations regarding Information, in no event will either party's liability to the other for any costs, expenses, or damages, regardless of the form of action, whether based on contract, tort, negligence, strict liability, products liability or otherwise, ever exceed the amount paid to the AKU hereunder. Under no

circumstances will either party be liable to the other for loss of use or profits or other collateral, special, consequential or other damages, losses, or expenses.

IN WITNESS WHEREOF, the Parties have signed and subscribed to this Sub-agreement through their authorized representatives.

FOR AND ON BEHALF OF AKU
UNIVERSITY

FOR AND ON BEHALF OF JMU

{Name of Authorized Signatory}
{Title}

{Name of Authorized Signatory}
{Title}

AKU'S INVESTIGATOR

JMU'S INVESTGATOR

Dr Zafar Fatmi
Associate Professor

Dr Fujio Kayama
Professor

Department of Community Health Sciences

Department of Environmental &
Preventive Medicine, School of Medicine

ANNEXURE A

Following is a brief outline of the scope of work of the AKU:

- Provide technical and logistic support on ground in Pakistan for facilitation of the overall study objectives.
- Collect process and store specimens before shipping to JMU, of food for three days from 50 households each from urban and rural location (for women, her newborn and young child under-5 years) (as described in the proposal).
- Collect process and store specimens before shipping to JMU, of blood, placenta, cord blood, hairs and nails samples from above study participants.
- Ship the specimens through mail in appropriate condition.

ANNEXURE B

BUDGET

ANNEXURE

BANK ACCOUNT INFORMATION

Request for Payment via Wire Transfer

INSTRUCTIONS:

1. Please complete this form and returned.

Bank information for fund transfer.

Account Title : _____

Account No : _____

Currency Account: _____

Name of Bank: _____

Bank Address : _____

Swift Code: _____

ABA Chips: _____

Any other information that facilitates the funds transfer: _____

Intermediary Bank if any: _____

Swift Code: _____

ABA Chips: _____

Any other information that facilitates the funds transfer: _____

17. 研究成果物の刊行物の一覧表

1. Ogawa M, Kayama F. A study of the association between urinary aluminum concentration and pre-clinical findings among aluminum-handling and non-handling workers. *J Occup Med Toxicol*. 2015 Mar 31;10:13. PMID: 25866547
2. Ilmiawati C, Yoshida T, Itoh T, Nakagi Y, Saijo Y, Sugioka Y, Sakamoto M, Ikegami A, Ogawa M, Kayama F. Biomonitoring of mercury, cadmium, and lead exposure in Japanese children: a cross-sectional study. *Environ Health Prev Med*. 2015 Jan;20(1):18-27. PMID: 25293698

